

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

MID3343 - DESIGN SPECIFICATION AND PROTOTYPING

(All sections / Groups)

15 October 2018
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question Paper consists of 3 pages with 5 questions only.
2. **Answer FOUR (4) only** from the FIVE (5) questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

1. (A) Draw a diagram chart for metal process containing three categories of metal states including sub-category of each processes (17 marks)

(B) (i) List four (4) limitations of metal sheet bending. (4 marks)

(ii) List four (4) limitation of metal deep drawing. (4 marks)

(Total 25 marks)

2. (A) Differentiate two (2) criteria of Non-Ferrous metal and Ferrous metal by giving one (1) example of each material. (9 marks)

(B) (i) List four (4) different criteria of a process for metal sheet forming for (Plastic State) and (Solid State) Spinning and Roll Forming process. (10 marks)

(ii) Identify four (4) product character by using the metal sand casting process. (6 marks)

(Total 25 marks)

3. (A) List five (5) different criteria of process for metal sheet forming for Spinning and Roll Forming process. (15 marks)

(B) Differentiate two (2) criteria of pure metal and alloy with giving one (1) example of each material. (10 marks)

(Total 25 marks)

Continued...

4. (A) Describe the basic plastic process of Rotational Molding. Provide your answer with three (3) product samples made by this method. Explain four (4) advantages of this process. (15 marks)

- (B) Describe the general process of plastic Compression Molding. Explain two major requirements of this process. (10 marks)

(Total 25 marks)

5. (A) Identify three (3) advantages and three (3) disadvantages of Plastic Extrusion Blow Molding process. (12 marks)

- (B) Identify four (4) advantages and three (3) disadvantages of Plastic Injection Blow Molding process. (13 marks)

(Total 25 marks)

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